

Notes on new and little known Oriental Histeridae (Col.)

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Notes on new and little known Oriental Histeridae (Col.) – Two new genera, *Athomalus* (type species: *Athomalus sumatranus* sp. n.) and *Cryptomalus* (type species: *Australomalus kuscheli* Mazur) of *Paromalini* are established. The systematical status of *Paromalini* is discussed and a short key to the genera is given. The systematical position of the subgenus *Asterister* Desbordes is also discussed (genus *Margarinotus* Marseul). The following new species are described: *Antongilus cribrifrons*, *Athomalus sumatranus* and *Margarinotus (Asterister) bicolor*.

Key-words: Coleoptera - Histeridae - Taxonomy - Asia

INTRODUCTION

This paper is based on the materials collected by members of the staff of the Natural History Museum of Geneva during their Asian expeditions.

For the privilege of studying the materials mentioned the author is deeply indebted to Dr. Ivan Löbl.

All the types are deposited at the Natural History Museum of Geneva.

DESCRIPTION OF SPECIES WITH ADDITIONAL REMARKS

Antongilus cribrifrons sp. n.

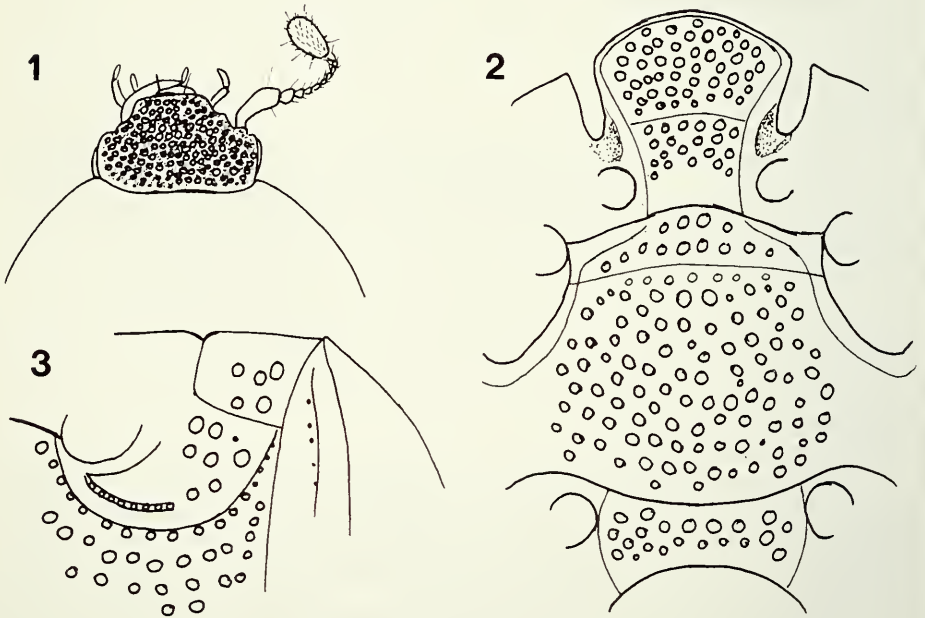
Body oval, convex, brownish-red to pitch-brown, shiny. Antennae a little paler as body, funiculus yellowish-brown, the antennal club yellow, tomentose, covered with long hairs. Head (Fig. 1) longitudinally impressed with an indistinct carina at middle, very coarsely and densely punctured (0.1-0.3). Frontal stria absent, Labrum about 3 times wider as long.

Pronotum nearly twice as broad as long, narrowed anterad, coarsely but not too densely punctate (2-4). Marginal stria complete, distinct, crenate behind the head,

reaching posterior angles. Pronotal base with irregular row of punctures. Scutellum absent. Elytrae broadest at humeri, nearly as long as broad, similarly punctured as pronotum, finely incised along the suture apically. Dorsal striae absent, with only indistinct oblique spot basally, reaching to the 1/3 of elytral length. Marginal elytral stria thin but distinct, complete, reaching from base to apex. Epipleurae flat with some punctures arranged into an irregular row. Epipleural stria complete, the marginal epipleural one marked at apex only.

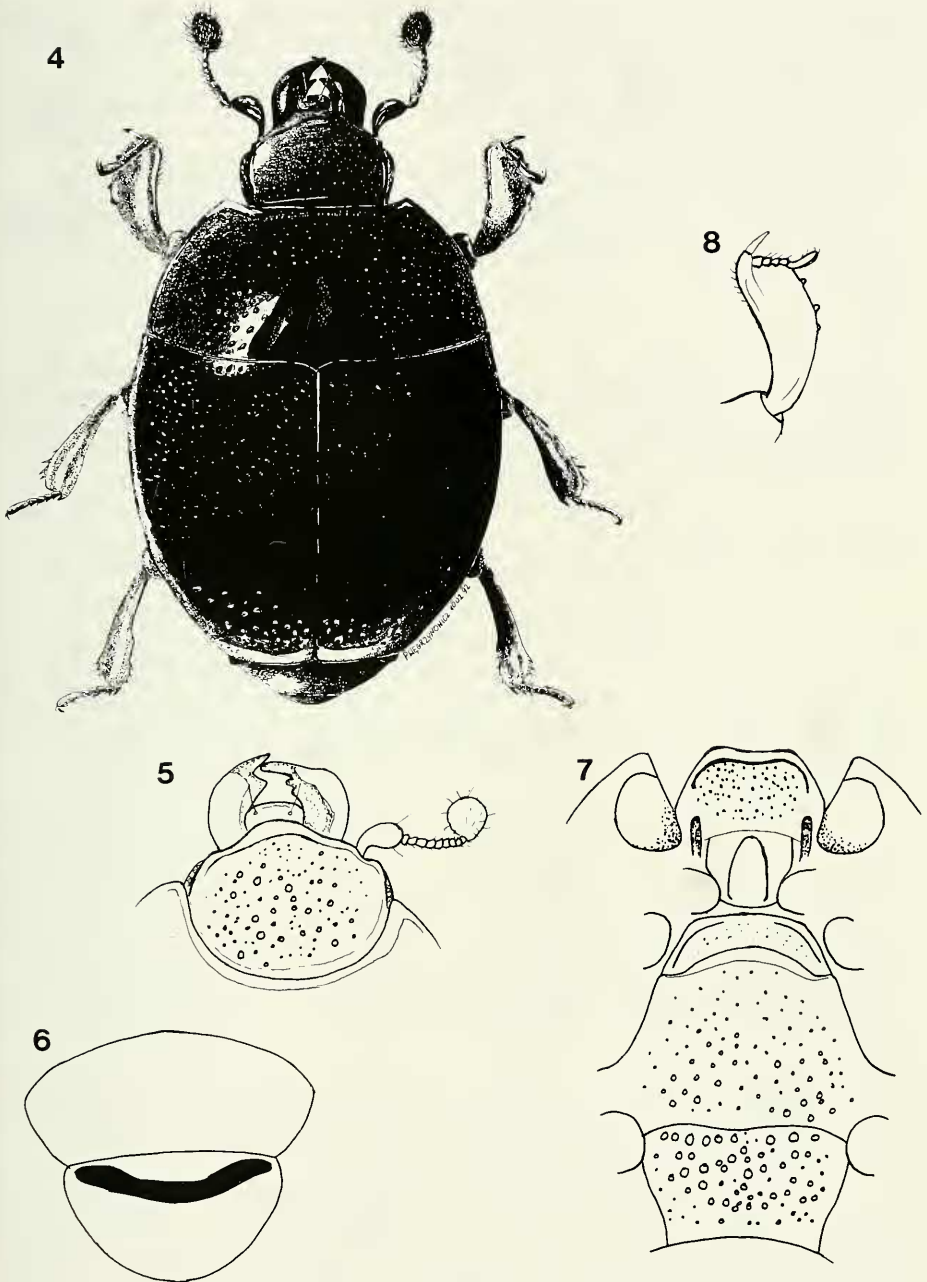
Pygidium feebly convex, covered with coarse punctures, uniformly distributed (2-4).

Prosternal lobe (Fig. 2) broadly rounded, distinctly margined, coarsely and rather densely punctured (0.5-1.0). Prosternum flat, nearly quadrate, a little emarginate basally, as punctured as prosternal lobe, especially at apex. Carinal striae distinct, nearly parallel. Mesosternum short, coarsely and densely punctured (0.7-1.0), its marginal stria widely interrupted anteriorly. Mesometasternal suture indistinct. Lateral metasternal stria (Fig. 3) distinct, accompanied by a row of punctures, joining the mesepimeral suture near external edge; mesepimeron with some large punctures. Mesopostcoxal disc with shortened stria and some punctures laterally. Metasternum convex, covered with large punctures uniformly distributed (1-2). Abdominal segment I short, margined laterally, as punctured as metasternum.



FIGS 1-3

Antongilus cribrifrons sp. n. 1 - head, 2 - ventral side, 3 - meso-metasternal region.



FIGS 4-8.

Athomalus gen. n. *sumatranus* sp. n. 4 - outline of body, 5 - head, 6 - pygidial sculpture of female, 7 - ventral side, 8 - foretibia.

Legs of normal length, paler as body, reddish-brown. All the tibiae a little dilated, the protibiae with median tooth and multimicrodentation at outer margin.

Length: PE 1.3 mm; total: 1.4-1.5 mm. Width: 1.3 mm.

H o l o t y p e : Indonesia, Sumatra, Aceh, Mt Leuser NP, 300-500 m, Ketambe, 23-30.XI.1989, leg. Löbl, Agosti, Burckhardt.

P a r a t y p e s : 21 specimens, same locality, collectors and data as holotype.

From all the species described as far it differs by cribrate punctation of the head, from the nearest relative, *A. bengalensis* Mazur, by the coarser punctation on the under side and smaller size.

Athomalus gen. n.

Body oval in outline, less or more convex. Clypeo-frontal stria present. Pronotal base with two perpendicular striae. Elytrae without dorsal striation. Carinal striae of prosternum present. Mesosternum not emarginate anteriorly, mesometasternal suture elevated. The legs and pygidial structure typical for the tribe Paromalini.

Type species: *Athomalus sumatranus* sp. n.

Athomalus sumatranus sp. n.

Body (Fig. 4) shortly oval, convex, its colour brownish-black, strongly shiny. Head (Fig. 5) flat, covered with coarse punctures, moderately distributed (0.5-1.5). Clypeo-frontal stria distinct, complete, sinuous at middle, united laterally with the supraorbital one. Labrum smooth, transverse, with two long yellow setae laterally. Mandibles convex, very finely and sparsely punctulate. Antennae paler, scapus and flagellum yellowish-brown, the antennal club with dense, yellow tomentum and with some long hairs.

Pronotum nearly twice as broad as long at base, narrowed anterad, rather uniformly covered with coarse punctures (0.5-1.5). Pronotal base with two perpendicular striae, bent inwardly at apex, reaching almost to the middle. The area between striae with shallow longitudinal impression, more finely punctured. Marginal stria complete, crenate behind the head, reaching to the posterior angles and a little prolonged along the base. Scutellum absent. Elytrae rounded, similarly punctured as pronotum. Epipleurae smooth and flat, with marginal elytral and epipleural stria not prolonged at elytral apex. Elytral base with indistinct spot of oblique, thin, dorsal stria.

Propygidium transverse, flat, very finely and rarely punctulate, more or less alutaceous. Pygidium: male, very finely and sparsely punctulate, with two shallow, longitudinal impressions laterally, distinctly alutaceous. Female (Fig. 6) pygidium with deep transversal sulcus at base and impressed apically.

Prosternal lobe (Fig. 7) emarginate at apex and deeply margined, covered with distinct but moderately dense punctation. Prosternum rather short, the carinal striae nearly parallel, united arcuately at apex. Mesosternum short, very indistinctly punctulate, its anterior margin slightly rounded, not emarginate. Marginal stria broadly interrupted anteriorly. Mesosternal suture very distinct, elevated, the metasternum behind this suture concave. Mesometasternal stria very thin and fine, united with marginal lateral stria. Metasternum smooth at disc, more distinctly punctate at sides

(0.5-2.0). Abdominal segment I margined laterally, coarsely punctured at base (0.5-1.0), more finely apically.

Legs paler as body, reddish-brown. Protibiae (Fig. 8) a little curved and dilated, covered with 3-4 small teeth at outer margin. Mid- and hindtibiae with some spinules and setae.

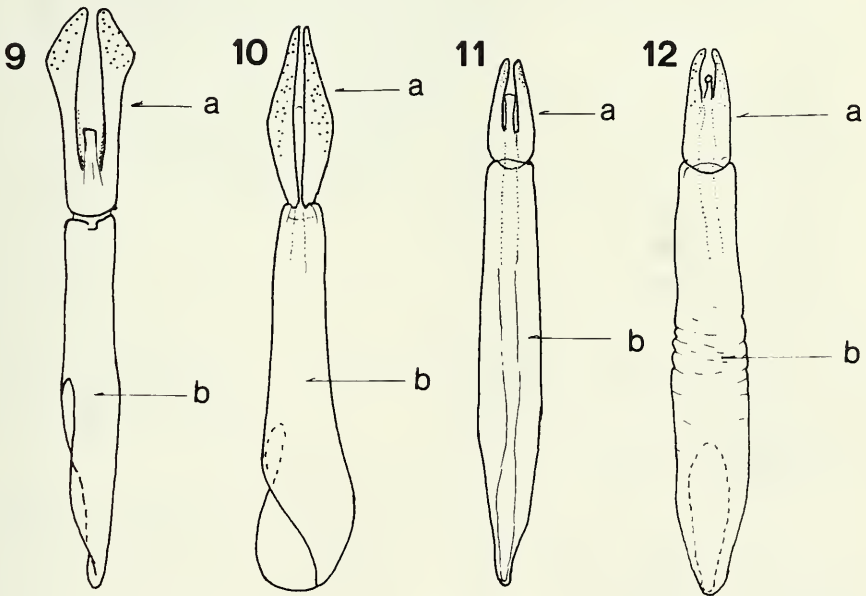
Length: PE 1.7-1.8 mm: total: 2.2-2.3 mm. Width: 1.5 mm.

H o l o t y p e : A male, Indonesia, Sumatra, Aceh, Mt Leuser NP, 300-500 m, Katambe, 23-30.XI.1989, leg. Löbl, Agosti, Burckhardt.

A l l o t y p e : A female, same locality, collectors and data.

P a r a t y p e s : 10 specimens of both sexes, same locality, collectors and data as the holotype. Four of them in the author's collection.

This new species and genus represent the tribe Paromalini. It is, however, noteworthy that there are different definitions of the systematical status of the tribe. The most extreme one is that by Kryzhanovskij (KRYZHANOVSKIJ & REICHARDT 1976) who is dividing the subfamily Dendrophilinae, classifying among the Dendrophilini all the species with dorsal striation while the species without it are placed within the tribe Paromalini. Another opinion was presented by VIENNA (1980). According to him, the tribe Paromalini includes the species with short epistoma margined usually by the clypeo-frontal stria. This definition was followed by the majority of the coleop-



Figs 9-12.

Edeagus. 9 - *Xestipyge* sp., 10 - *Carcinops* sp., 11 - *Platylomalus* sp., 12 - *Paromalus* sp. a - parameres, b - basal piece.

terologists, including the author (MAZUR 1984). Additionally we can say that the very long basal piece and relatively short parameres of the edeagus are diagnostic characters for the tribe (Figs 9-12).

According to this definition the tribe Paromalini includes 12 genera together with the new ones, described here: *Athomalus* and *Cryptomalus*.

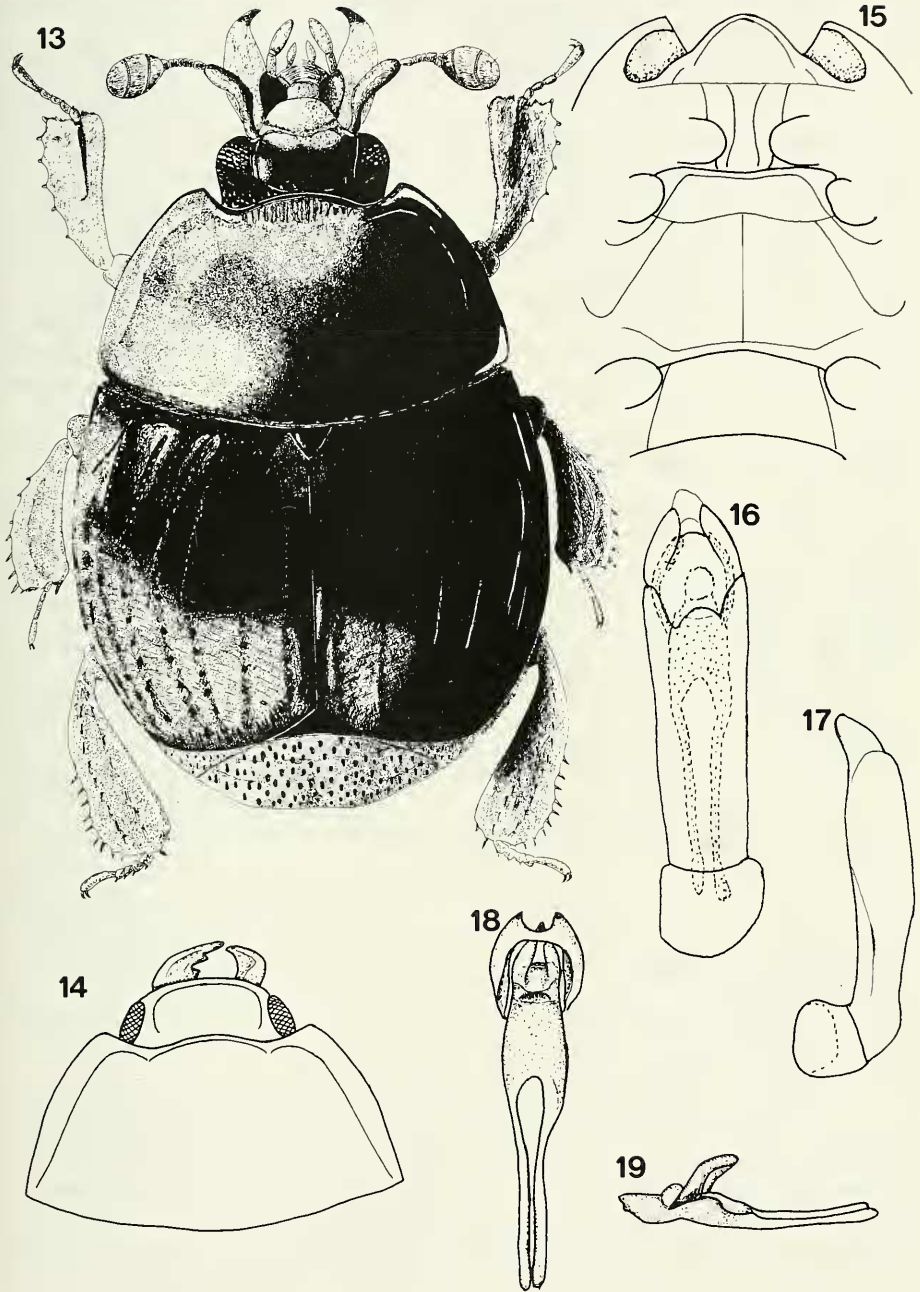
When I was describing the genus *Australomalus* I pointed out the marginal mesosternal stria being replaced by a median stria as a principal character for it. But the type species, *A. fijianus* Mazur, has, however, got a very peculiar structure of the sternum (foveate mesosternum, etc.) which is not to be found in the remaining species. So it creates the necessity to establish a new genus for the species previously placed in the genus *Australomalus* (except *A. fijianus*). I propose the name *Cryptomalus* for it with *Australomalus kuscheli* Mazur as the type. All the species belonging here have been keyed lately (MAZUR 1991).

In conclusion, the following key may be used for separating all the genera belonging to the tribe Paromalini.

1. Elytral disc with normal dorsal striae, usually with sutural in addition to subhumeral 2
- Elytral disc punctate, without striae except vague rudiments, these usually basal 6
2. Metasternum with a second lateral stria, both these striae parallel or nearly parallel to each other *Diplostix* Bickhardt
- Metasternum with one lateral stria only 3
3. Body elongate, almost cylindrical. Dorsal striae straight, not arched inwardly.....
- Body oval in outline, more or less convex. Dorsal striae, especially the inner, arched towards the scutellum at base 4
4. Fourth dorsal stria arched over to and recurved along suture... *Xestipyge* Marseul
- Fourth dorsal stria sometimes arched over to, but not recurved along suture 5
5. Pronotal sculpture consisting of alternating coarsely and deeply punctured and completely smooth areas. Propygidium with a transverse row of very large and deep punctures *Coomanister* Kryzhanovskij
- Pronotal sculpture normal, without smooth areas surrounded by large punctures. Propygidial punctation simple *Carcinops* Marseul
- a) ground punctulation consisting of groups of several closely placed minute punctules. Inner subhumeral stria complete. Subg. *Carcinopsida* Casey
6. Prosternal keel not striate *Paromalus* Erichson
- a) sutural stria present in apical part Subg. *Isolomalus* Lewis
- Prosternal keel striate 7
7. Propygidium relatively long, margined by a transverse stria *Pachylomalus* Schmidt
- a) clypeo-frontal stria complete Subg. *Canidius* Cooman

FIGS 13-19.

Margarinotus (Asterister) bicolor sp. n. 13 - outline of body, 14 - head and pronotum, 15 - ventral side, 16, 17 - edeagus: 16 - dorsally, 17 - laterally, 18, 19 - median lobe: 18 - dorsally, 19 - laterally.



- Propygidium shorter, without margining stria 8
- 8. Clypeo-frontal stria widely interrupted anteriorly *Eulomalus* Cooman
- Clypeo-frontal stria complete (Fig. 5) 9
- 9. Anterior margin of mesosternum not emarginate (Fig. 7). Median stria absent. Mesometasternal suture elevated, metasternum impressed behind it *Athomalus* gen. n.
- Anterior margin of mesosternum more or less emarginate; mesosternum with median stria. Mesometasternal disc without elevation and impression 10
- 10. Mesosternum with two deep foveae laterally. Metasternum coarsely and closely punctate *Australomalus* Mazur
- Mesosternum not foveate. Metasternal punctation simple 11
- 11. Marginal mesosternal stria narrowly interrupted anteriorly, prolonged onto anterior margin *Cryptomalus* gen. n.
- Marginal mesosternal stria widely interrupted anteriorly, not prolonged onto anterior margin *Platylomalus* Cooman

Margarinotus (Asterister) bicolor sp. n.

Body (Fig. 13) oval, convex, shiny. Upper side very finely punctulate. Epistoma, mouthparts, mandibles, anterior part of pronotum, apical half of elytrae, pro- and pygidium brownish-red. Forehead flat, frontal stria complete, feebly and inwardly bent at middle. Labrum narrow, as long as broad. Mandibles flat or feebly convex, extremely finely punctulate. Scapus and funiculus brownish-red, the antennal club darker, tomentose, with two distinct sutures.

Pronotum rounded laterally, bisinuous at anterior margin. Lateral and anterior part brownish-red, only the semicircular, basal part of pronotum black. Inner lateral stria distinct, incised and feebly crenate, parallel to margin, reaching basally the posterior angles and widely interrupted behind the head and replaced here by an apical stria (Fig. 14). There is also a shallow fovea at midlength of lateral stria with a black spot at bottom. Marginal pronotal stria thin, widely interrupted anteriorly, reaching to the base. Pronotal base with an indistinct longitudinal impression in front of scutellum. Epipleurae and apical half of elytrae reddish-brown, the basal part black. Dorsal striae distinct and incised. 1-4 complete, the fifth one reaching almost the midlength, the sutural stria complete, arched inwardly at base. All the striae distinctly crenate. Outer subhumeral stria complete, the inner one absent.

Propygidium and pygidium reddish-brown, feebly convex, alutaceous, covered with double punctuation, consisting of large punctures with flat bottom intermingled with the small ones, uniformly but not too densely distributed (0.5-2.0).

Prosternal lobe (Fig. 15) rounded, distinctly margined anteriorly, shallowly and finely punctulate, more coarsely at sides. Prosternum alutaceous, very rarely and finely punctulate. Carinal striae thin but distinct, divergent anteriorly. Mesosternum straight at anterior margin, finely and rarely punctulate. Marginal stria complete, reaching the mesometasternal suture. Metasternum as punctulated as mesosternum, the lateral stria very distinct, arched apically. Median line distinct. Metasternal apex with a fine transverse stria. Abdominal segment I alutaceous, distinctly margined laterally.

The structure of the edeagus and median lobe of the male as figured (Figs 16-19).

Legs reddish-brown, a little expanded, the foretibiae with 6-7 small teeth, the mid- and hindtibiae with numerous spinules at outer margin.

Length: PE 2.5-3.2 mm; total: 3.0-4.0 mm. Width: 2.2-2.8 mm.

H o l o t y p e : A male, Borneo, Sabah, Mt Kinabalu NP, above Por. Hot Spgs, 520 m, 15.VIII.1988, leg. A. Smetana.

A l l o t y p e : A female, same locality, collector and data.

P a r a t y p e s : 7 specimens of both sexes, same locality, collector and data as the holotype. Four of them in the author's collection.

It differs very markedly from all the Oriental *Margarinotus*-species by its curiously colored body.

The subgenus *Asterister* has been originally described as a distinct genus to include a single species, *A. nilgirianus* Desbordes, from South India. According to DESBORDES (1920) who described it, the genus occupies an intermediate position between the tribes Histerini and Platysomatini. Not seeing the type I placed it wrongly within the tribe Platysomatini (MAZUR 1984). Later Wenzel (pers. comm.) informed me that *Asterister nilgirianus*, the type species for the genus, is a true *Margarinotus*-species. Lately I synonymized (MAZUR 1987) *Margarinotus meridionalialis* Mazur with *A. nilgirianus* considering *Asterister* to be a subgenus of *Margarinotus* closely related to the subgenus *Grammostethus* Lewis as a more specialized derivative of this species complex.

External differences between the subgenera *Grammostethus* and *Asterister* are small. The replacing of lateral pronotal stria by an apical stria might be used as a principal character separating them. Further, the basally arched, complete sutural stria and the, at least, very small reddish maculae or spots on pronotal margins and pygidium have also a diagnostic value.

In the structure of the edeagus and median lobe it resembles a second type of the male genitalia of the subgenus *Grammostethus*, including *Margarinotus niponicus* (Lewis) (ÔHARA 1989).

Margarinotus bicolor is the second species of the subgenus *Asterister*.

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